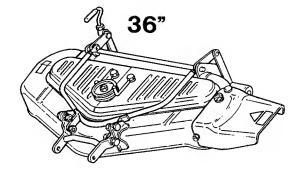
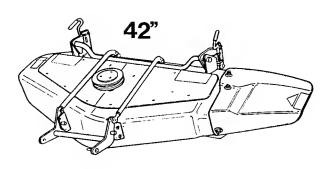
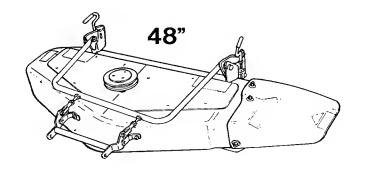
# OPERATOR'S MANUAL



# ROTARY MOWERS





36" ROTARY MOWER MFG. NO. 1690023 42" ROTARY MOWER MFG. NO. 1690252 48" ROTARY MOWER MFG. NO. 1690021

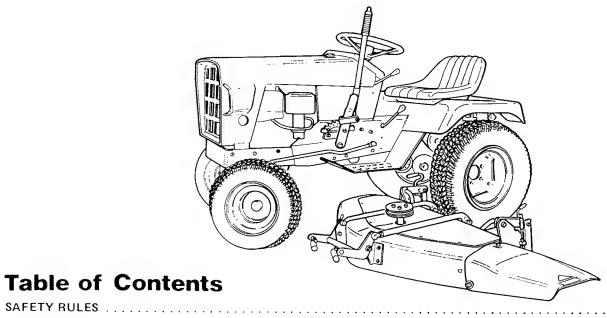
#### Dear Customer:

Congratulations on your purchase of this mower. Your mower has been carefully designed and built to give you years of dependable service. With proper use and care, it will help you do your mowing jobs quickly and easily.

To make sure you get the utmost value from your purchase, study this manual carefully. Also study the tractor owner's manual and practice driving the tractor before using the mower. Have anyone else who plans to run the tractor and mower read this information also.

For the safety of you and others, study the safety information on page 2 of this manual and in the tractor owner's manual. Review this information often. It is there for your benefit and is important.

We have provided you with other information which will enable you to assemble and service your mower. Should you need assistance with any of these procedures, your dealer will be happy to help with any service or repair work.



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Read these safety rules and follow them closely. Failure to obey these rules could result in loss of control of vehicle, severe personal injury to yourself or bystanders, or damage to property or equipment.

## Safety Rules



This notation preceding Cautions and Warnings in the text signifies important precautionary steps which, if not properly followed, could result in personal injury or damage to your equipment.

#### General

- Read the Operating and Service Instructions carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
- Never allow children to operate the machine. Do not allow adults to operate it without proper instruction.
- Do not carry passengers.
- Keep the area of operation clear of all persons, particularly small children and pets.

- When using any attachments, never direct discharge of material toward bystanders nor allow anyone near the vehicle while in operation.
- Make Sure:
  - a. tractor and attachments are in good operating condition,
  - b. all safety devices and shields are in place
  - c. and in good working condition, and
  - d. all adjustments, (cutting height, etc.), have been made.

#### Preparation

- Handle gasoline with care it is highly flammable.
  - a. Use approved gasoline container.
  - b. Never remove the cap of the fuel tank or add gasoline to a running or hot engine, or fill the fuel tank indoors. Wipe up spilled gasoline.
- Do not run the engine indoors.
  Exhaust fumes are dangerous.

- Clear the work area of objects which might be picked up and thrown.
- Disengage all attachment clutches and shift into neutral before attempting to start the engine.
- Wear heavy footwear. Do not operate tractor when barefoot or when wearing open sandals or canvas shoes.

#### Operation

- Disengage power to attachment(s) and stop the engine before leaving the operator's position.
- Disengage power to attachment(s) and stop the engine before making any repairs or adjustments.
- Shut the engine off when unclogging chute.

- Stay alert for holes in the terrain and other hidden hazards. Be extra careful when operating on wet or slippery surfaces.
- The vehicle and attachments should be stopped and inspected for damage after striking a foreign object, and the damage should be repaired before restarting and operating the equipment.

- Disengage power to attachment(s) when transporting or not in use.
- When using the vehicle with mower, proceed as follows:
  - a. Mow only in daylight or in good artificial light.
  - Never operate the tractor without the mower clutch safety interlock switch properly attached and working.
  - c. Check the blade mounting bolts for proper tightness at frequent intervals.
- Do not stop or start suddenly when going uphill or downhill.
   Mow up and down the face of steep slopes; never across the face.
- Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Use extreme caution when changing direction on slopes.

- Watch out for traffic when crossing or near roadways.
- If equipment begins to vibrate abnormally—disengage power to attachments and stop engine at once. Inspect for damage and correct before starting up tractor.
- Use care when pulling loads or using heavy equipment.
  - a. Use only drawbar hitch point.
  - b. Limit loads to those you can safely control.
  - c. Do not turn sharply. Use care when backing.
  - d. Use counterweight (s) or wheel weights when suggested in the operator's manual.
- Take all possible precautions when leaving the vehicle unattended, such as disengaging the power take off, lowering the attachment (s), shifting into neutral, setting the parking brake, stopping the engine, and removing the key.
- Keep the vehicle and attachments in good operating condition, and keep safety devices in place.

## Maintenance and Storage

- Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- Do not change the engine governor settings or overspeed engine.
- To reduce fire hazard, keep the engine free of grass, leaves, or excessive grease.
- Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark.
   Allow the engine to cool before storing in any enclosure.

## **Owner Benefits**

Free-floating design — pivots with front axle; combined with full width rear rollers, mower follows ground contours to eliminate scalping.

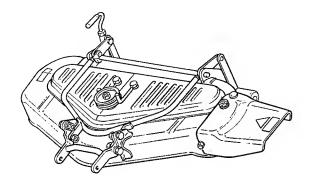
Quick, easy installation and removal — only three clip retained pins attach mower to tractor.

Easy maintenance — PTO belt replacement possible without removing unit.

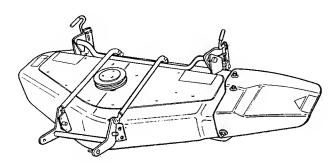
 $\label{eq:thm:cut:monoth} \textbf{Three staggered blades} - \text{give smooth, overlapping, even cut.}$ 

Unit designed to mate with your tractor — no modifications required for installation and pulleys sized to produce safe, efficient blade speed.

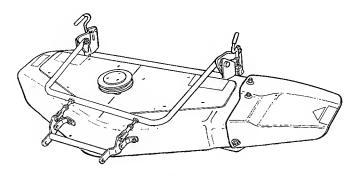
Full width cut - for fast, efficient mowing.



36" Mower

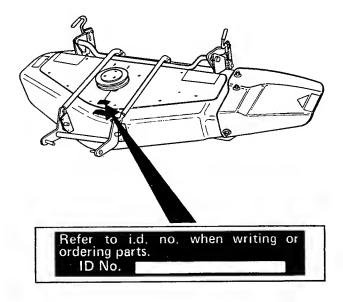


42" Mower



'48" Mower

When ordering replacement parts for your mower, be prepared to give your dealer the identification number found on the mower as shown below. We suggest that you locate and record the identification number below for easy reference.



# -NOTES-

#### Installation

#### CONTENT OF SECTION

This section provides the installation and removal procedures for the three types of mowers: 36", 42", and 48". The mower and hitch must be assembled before the mower can be installed on the tractor. The necessary assembly procedures are provided in the Assembly Section of this manual.

Two separate installation procedures are provided. Selection of the procedure that you should use is easy. Simply compare figure 1 to the hitch brackets at the front of your tractor.

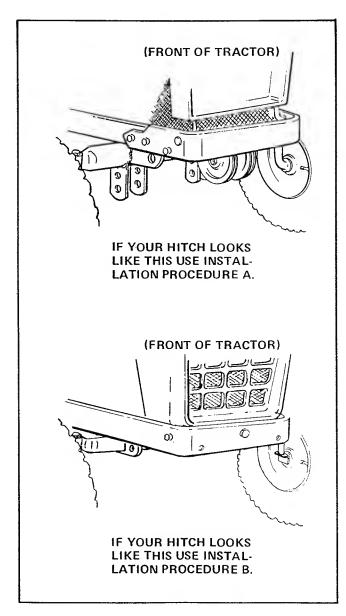


Figure 1. Front Tractor Hitch

#### MOWER INSTALLATION PROCEDURE A

To prepare for installation of the mower, park the tractor to the right of the mower, as shown in figure 2. This should be done preferably on a level concrete or blacktop drive. Position the front tractor wheels for a sharp right turn and install the mower as follows:

- 1. Slide mower under the tractor.
- 2. Straighten the front wheels.

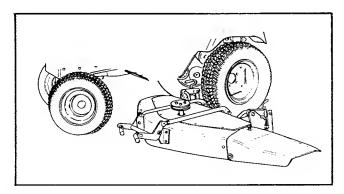


Figure 2. Position Mower and Tractor

3. Lift the front of the mower, insert pins (item A, figure 3) through mower hitch (B) and tractor hitch (C). Secure both pins (A) with spring pins (D).

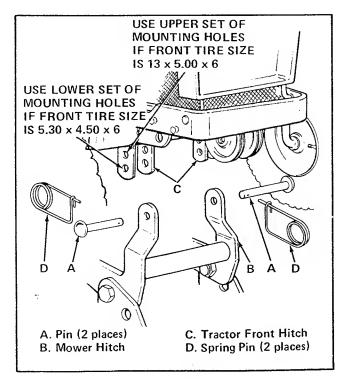


Figure 3. Attach Mower

4. Move the tractor lift lever all the way forward. Using pin (item A, figure 4) attach mower lift link (C) to tractor lift.

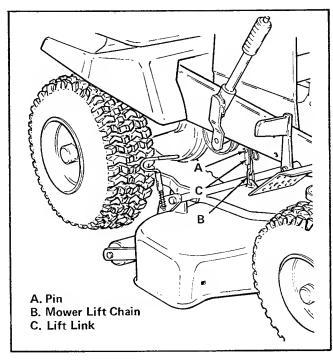


Figure 4. Attach Mower to Tractor Lift

- 5. Disengage the tractor front power take-off lever, by pulling all the way to the rear.
- 6. Install mower drive belt (item A, figure 5) over tractor pulley (B), idler pulleys (C), and mower pulley (D).

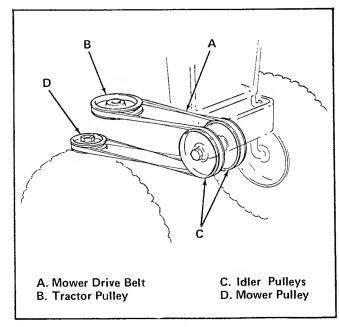


Figure 5. Install Mower Drive Belt

- 7. Position and tighten idler belt guide as shown in figure 6.
- 8. Proceed to Mower Leveling Procedure.

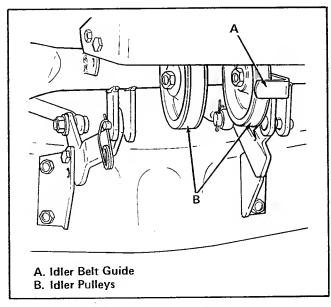


Figure 6. Position Belt Guide

#### MOWER INSTALLATION PROCEDURE B

To prepare for installation of the mower, park the tractor to the right of the mower, as shown in figure 2. This should be done preferably on a concrete or blacktop drive. Position the front wheels of the tractor for a sharp right turn and install the mower as follows:

- 1. Slide the mower under tractor.
- 2. Straighten the front wheels.

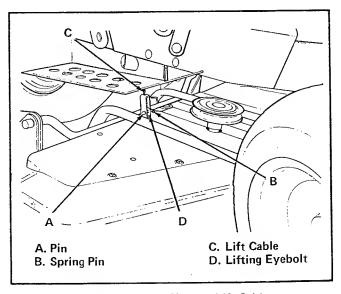


Figure 7. Attach Tractor Lift Cable

- 3. Using tractor lift lever or electric switch, lower tractor lift cable.
- 4. Use pin (item A, figure 7) and spring pin (B) to attach tractor lift cable (C) to lifting eyebolt (D) on mower.

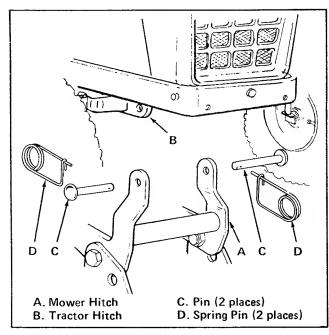


Figure 8. Attach Mower

- 5. Using tractor lift or electric switch, raise mower.
- 6. Lift front of mower and attach mower hitch (item A, figure 8) to front tractor hitch (B) using pins (C) and spring pins (D).

- 7. Use lift lever or electric lift switch on tractor to lower mower to ground.
- 8. Push belt tensioning lever (item A, figure 9) fully down and forward.
- 9. Raise tractor seat to gain access to power take-off pulleys.
- 10. Install mower drive belt (item B) over mower pulley (C) and tractor pulleys (D and E). Belt must ride in inner groove of PTO pulley (E).
- 11. Pull belt tensioning lever (item A) fully back and up to tighten mower drive belt (item B).
- 12. Lower and secure tractor seat.
- 13. Proceed to Mower Leveling Procedure.

#### MOWER LEVELING PROCEDURE

The following adjustments are important and should be performed before using the mower. However, the adjustments are normally required only when installing the mower on the tractor for the first time or after repairs to the mower or tractor hitches. To level and adjust the mower, proceed as follows:

#### **A** WARNING

Make sure tractor is off and key is removed.

1. Check the tractor tire pressures. The pressure in the tires on the right and left sides should be equal. (Refer to tractor manual for correct tire pressure.)

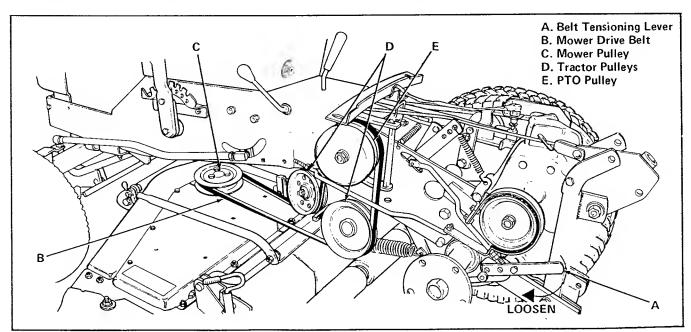


Figure 9. Install Mower Drive Belt (Foot Rest and Wheel Removed for Clarity)

2. Turn both mower height adjustment handles (item A, figure 10) fully clockwise. The 36" mower has only one handle.

#### **A** WARNING

Do not handle mower blades with bare hands. Careless or improper handling may result in serious injury.

- 3. Rotate the mower blades so the tips point straight forward and backward, as shown in figure 10.
- 4. Measure and note the distance from the front tip of the center blade to the ground.
- 5. Measure the distances from the rear tips of the two side blades to the ground. These distances must be equal to each other and 1/4 to 1/8 inch less than the distance measured in step 4.

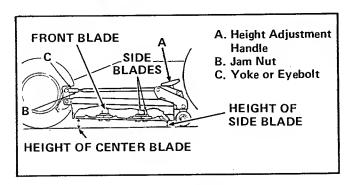


Figure 10. Level Mower

#### NOTE

If the measurements taken in step 5 are satisfactory, proceed to step 8. If the measurements are not correct, mower bail assembly eyebolts or yokes must be adjusted. Both eyebolts or yokes must be adjusted to obtain difference in height from front tip to rear tip. If only side-to-side leveling is required, the eyebolt or yoke of only one side need be adjusted. To adjust the 36" mower, proceed to step 6. To adjust a 42" or 48" mower, proceed to step 7.

#### **A** WARNING

To prevent injury when performing step 6 to 7, block up the front of the mower before removing the eyebolts.

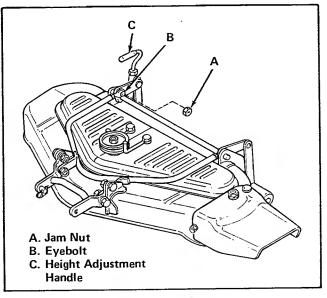


Figure 11. 36" Mower

- 6. For 36" mower:
  - a. Loosen jam nuts (item A, figure 11).
  - b. Disconnect eyebolts (B) from rear bracket.
  - c. Turn eyebolt clockwise to decrease rear height or counterclockwise to increase rear height.
  - d. Reconnect eyebolts and retighten jam nuts. Take the measurements again. If they are correct, proceed to step 8. If they are not correct, repeat step 6.
- 7. For 42" or 48" mower:
  - a. Loosen jam nuts (item B, figure 10).
  - b. Disconnect the yokes or eyebolts (C) from the mower hitch.
  - c. Turn the yoke or eyebolt counterclockwise to increase the rear height or clockwise to decrease the rear height.
  - d. Reconnect eyebolts and retighten jam nuts.
- 8. If the tractor you are using has two sets of mounting holes in the front tractor hitch, as shown in figure 1, the PTO lever must be adjusted. Refer to tractor manual.

#### REMOVING MOWER FROM TRACTOR

When necessary or desired, remove the mower from the tractor as follows:

1. Park the tractor on a solid level surface with space to remove the mower from the left

- side of the tractor. Turn the front tractor wheels for a sharp right turn.
- 2. Place the PTO clutch lever on the tractor in the disengaged position.
- 3. If your tractor is equipped with a belt tensioning lever, push it fully down and forward and raise the tractor seat deck.
- 4. Remove the mower drive belt from the mower and tractor pulleys.
- 5. Use tractor lift lever or electric lift switch to raise mower.

- 6. Remove the spring pins and pins to detach the mower hitch from the front tractor hitch. Reinstall the pins and spring pins on the mower hitch for storage.
- 7. Use the tractor lift lever or electric lift switch to lower the mower to the ground.
- 8. Remove the spring pin and pin to detach the mower from the tractor lift cable. Install the pin and spring pin on the tractor for storage.
- 9. Slide the mower out from under the left side of the tractor.

## **Operation**

#### CONTENT OF SECTION

This section provides operating procedures for the mower. These procedures assume the mower has been assembled and installed on the tractor.

#### CHECKS BEFORE STARTING

The checks listed below should be performed before each use of the mower.

- 1. Be sure you are familiar with the safety precautions, controls, and operation of the tractor. Read the tractor operating manual very carefully.
- 2. Check the mower to be sure it is properly installed and to be sure that all nuts, bolts, and pins are securely fastened.

#### A WARNING

Never operate the mower unless the discharge guard and either the deflector assembly or the vacuum collector adapter is fastened securely in place.

- 3. Refer to the Normal Care Section of this manual to determine and perform any needed care of the mower.
- 4. Clear the lawn of all sticks, stones, wire, and other debris which may be caught or thrown by the mower blades.

#### OPERATING THE MOWER

#### A WARNING

Do not work around mower housing area until you are certain that engine has stopped and the mower blades have stopped rotating.

Obey the caution sign, the danger sign, and the warning sign located on the mower housing. Make certain the discharge guard and either the deflector assembly or the vacuum collector adapter are securely in place before operating the mower.

Always disconnect the mower drive clutch and stop engine before leaving the tractor seat. If leaving the tractor and mower unattended, remove the ignition key. When operating the mower for the first time, begin by operating on level ground at a slow speed until you become familiar with the controls and handling of the tractor.

Because the operating power and motion is supplied by the tractor, tractor operation is the main element of mower operation. A general procedure for tractor operation with attachments is provided in the owner's manual for the tractor. However, four additional items must be considered when operating the tractor with the mower. These items are the cutting height, the mowing pattern, the engine speed, and the tractor speed. Each of these items is discussed in separate paragraphs below.

#### Cutting Height

The cutting height is adjusted by turning the two cutting height handles (item A, figure 10) equal amounts in the same direction. The 36" mower has only one handle (item C, figure 11). In either case, the cutting height can be adjusted anywhere within the mower's full range. The adjustment is best made above a hard level surface. To prevent early belt failures, never operate the mower unless the lift lever is completely lowered. Never use the lift lever for height adjustments.

The exact cutting height will depend upon the type and condition of your lawn and your own personal desires. Most lawns should be mowed to keep the grass approximately two to three inches high. Best results are obtained by mowing often and not too short. To keep a green lawn, never mow more than 1/3 of the height or more than one inch of the grass in a single mowing.

For extremely tall grass, adjust for maximum cutting height for the first mowing. Then readjust for the desired height and mow again.

On thick or springy grass or soft ground, the mower roller may sink into the lawn. In this case, it will be necessary to readjust the cutting height to keep the grass at the same height.

#### **Mowing Patterns**

Plan your mowing patterns to fit the area to be mowed. In most cases, one or two passes should be made around the area in a counterclockwise direction to keep the right side of the mower close to trees, shrubs, fences, and buildings as shown in figure 12. This practice will eliminate most of your hand trimming and keep the cut grass off fences, buildings, and sidewalks.

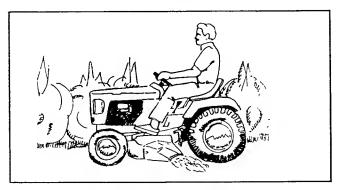


Figure 12. Mow with Right Side Near Obstructions

Normally, the remainder of the area should be cut in a clockwise direction as shown in figure 13. This will prevent recutting of the grass and spread it evenly over your lawn. The clippings, when decayed, make an excellent organic fertilizer.

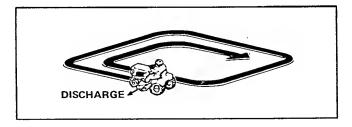


Figure 13. Mow in a Clockwise Direction

On frequently mowed lawns or when the grass is dry and light, it may be practical to mow in a

counterclockwise direction. This practice will throw clippings toward the center of the lawn where they can be easily gathered and removed.

Where possible, change the general mowing pattern for each cutting. (See figure 14 for mowing pattern diagrams.) Changing patterns will prevent matting of the lawn that causes an uneven appearance.

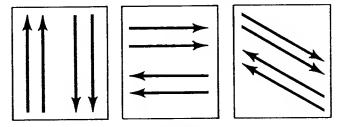


Figure 14. Change Mowing Patterns

#### **Engine Speed**

The engine speed control on the tractor should be set for 2/3 to full speed when mowing. When the grass is wet or over 2 inches high, the engine should be run at full speed for best results. However, avoid cutting wet grass when possible. If possible, cut the grass in the afternoon or evening when the moisture content is the lowest. This practice will help prevent grass diseases and clogging of the mower discharge.

#### Tractor Speed

All forward speeds of the tractor may be useful for mowing under some conditions. Higher speeds should be used only on smooth level lawns with light to moderate grass crops. Always select a speed slow enough to assure safe control of the tractor and a smooth even cutting of the grass.

### **Normal Care**

#### CONTENT OF SECTION

Your mower was designed and built to provide years of service with only minor care. Certain tasks, however, must be performed to keep the mower in good operating condition and to avoid costly repairs. This section describes and provides procedures for the necessary care of the mower.

#### SCHEDULED CARE

A schedule for routine care of the mower is provided in figure 15. Some of the schedule requirements are based on operating hours. For this reason, it will be necessary to determine or estimate total operating time. This is easily accomplished if your tractor is equipped with an hour meter. If not, you can determine normal times or regular mowing jobs. Multiply these normal times by the number of times you perform these jobs

and add any unusual operating time to estimate the total operating time.

A maintenance record (figure 25) is provided at the rear of this manual. Use this record to document all operating hours and repair or servicing actions for the mower.

#### **STORAGE**

To protect your mower, store it in an enclosed dry area. To prepare the mower for off-season storage, perform the following:

- 1. Remove mower from tractor. (Refer to procedure in Operation Section.)
- 2. Clean underside of mower to remove all grass and dirt.
- 3. Coat all bare metal surfaces with paint or a light coat of oil to prevent rusting.
- 4. Lubricate the mower. (See figure 16.)
- 5. Check, sharpen, and balance the mower blades. (See figure 17.)

Care Required	See Figure	Schedule			
		Before Each Use	After Each .Use	Every 50 Hours	Yearly
Check to be sure all screws, nuts, bolts, and pins are present and secure.	None	•			
Clean underside of mower to remove grass and dirt accumulations.	None		•		
Lubricate mower arbors.	16			•*	
Clean/sharpen blades.	17				•**
Lubricate idler pulley pivot.	18				•

<sup>\*</sup> At least once a year.

Figure 15. Summary of Scheduled Care

- 1. Remove mower from tractor. (Refer to procedure in Operation Section.)
- 2. Clean dirt and paint from grease fittings.

#### **A** CAUTION

Do not overgrease. Excess grease may easily get on belts and cause slippage.

Using grease gun, apply 4 to 5 shots of lithium based automotive grease to each fitting.

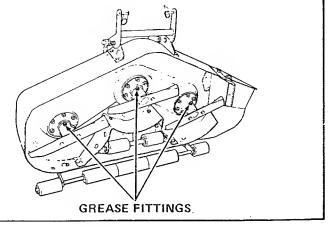


Figure 16. Lubricate Mower Arbors (50-Hour Care)

<sup>\*\*</sup>More often under heavy use and immediately after striking any hard object.

- 1. Remove mower from tractor. (Refer to procedure in Operation Section.)
- Check each of the three blades. Blades should be sharp and free of nicks and dents. If not, sharpen blades as described in remaining steps.

#### **A** WARNING

Do not handle mower blades with bare hands. Careless or improper handling may result in serious injury.

- To remove blade for sharpening, use wooden block to hold blade while removing its blade mounting capscrews.
- Use a file to sharpen blade to fine edge. Remove all nicks and dents in blade edge. If blade is severely damaged, it should be replaced.
- Check and balance blade. Use a balancing machine or the fixture shown. File material off heavier end of blade until it is balanced.

#### **A** WARNING

Blade mounting capscrews must be installed with lockwashers and securely tightened. Torque blade mounting capscrews to 32 footpounds.

 Install blade on arbor with tabs pointing up toward deck and secure with capscrews and lockwashers.
 Use wooden block to prevent blade rotation while installing and tightening blade mounting capscrews.

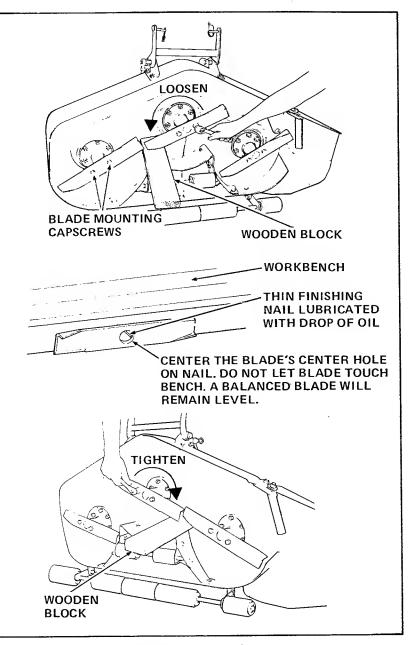


Figure 17. Check, Sharpen, and Balance Mower Blades (Yearly Care)

- Remove spring clip and disengage level adjusting rod from mower hitch.
- 2. Remove capscrews and nuts that secure cover. Then remove cover.
- 3. Apply a few drops of engine oil to idler pulley pivot.
- 4. Install and secure cover.
- 5. Engage level adjusting rod to hitch and secure with spring clip.

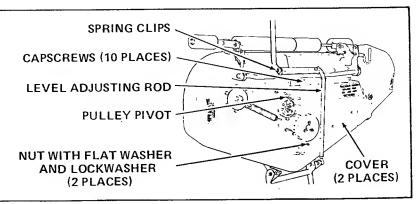


Figure 18. Lubricate Idler Pulley Pivot (Yearly Care)

## **Troubleshooting and Repair**

#### CONTENT OF SECTION

This section of the manual provides troubleshooting and repair instructions for the more common and easily corrected problems.

#### **A** WARNING

To avoid serious injury, perform maintenance on the mower only after stopping the tractor engine and waiting for the mower blades to come to a complete stop. Always remove the ignition key before beginning the maintenance to prevent accidental starting of the engine.

#### TROUBLESHOOTING PROCEDURES

Troubleshooting procedures are provided in figure 19. To use these procedures, first locate the problem description that best describes the trouble that you have encountered. Check the possible causes one at a time in the order that they are listed. Correct any problems that are found and operate the mower again to verify that you have eliminated the trouble.

Problem	Cause		
1. Mower will not raise.	A. Lift cable not attached or broken.		
	B. Lift lever or electric lift problem. See tractor manual.		
2. Mower cut is uneven.	A. Mower not leveled properly. Repeat leveling adjustment in mower installation procedure.		
	B. Tractor tires not inflated equally or properly.		
	C. Missing pin on mower hitch.		
3. Mower cut is rough looking.	A. Engine speed too slow.		
	B. Tractor speed too fast.		
	C. Blades dull and require sharpening.		
	D. Mower drive belt oily or worn. Clean or replace belt as necessary.		
	E. Deck drive idler pulley pivot frozen; needs lubrication.		
	F. Deck drive belt worn or broken; replace.		
4. Engine stalls easily with mower engaged.	A. Tractor speed too fast.		
	B. Engine speed too slow.		
	C. Cutting height set too low when mowing tall grass. Cut tall grass at maximum cutting height during first pass.		
	D. Discharge chute jamming with cut grass; cut grass with discharge pointing toward previously cut area.		
5. Excessive mower vibration.	A. Blade mounting screws are loose; tighten to 32 foot-pounds of torque.		
	B. Mower blades are bent and should be replaced.		
	C. Mower blades are out of balance; remove, sharpen, and balance blades as in figure 17.		
	D. Arbor shaft bent due to impact; check shaft for wobble.		
6. Excessive belt breakage occurs.	A. Loose or rough pulleys require replacement.		
	B. Using incorrect belt.		
	C. Pulley misaligned or shaft is bent.		

Figure 19. Troubleshooting Procedures

#### V-BELT REPLACEMENT

To replace the V-belt between the tractor PTO and the mower, follow the mower removal and installation instructions provided in the Operation Section of this manual.

To replace the internal V-belt, proceed as follows:

- 1. Remove the spring clips (item B, figure 20) and pull the level adjusting rods (item A) or bail assembly back to provide access for cover removal.
- 2. Remove the capscrews (item F) and the nuts with lockwashers and flat washers (item C).
- 3. Remove the cover (item E).
- 4. Remove the old belt.
- 5. Lubricate the idler pulley pivot (item D) with a few drops of engine oil. Wipe up any excess oil.
- 6. Clean the interior of the belt housing.
- 7. Install the new belt.
- 8. Reinstall the cover (item E) and secure by installing the capscrews (item F) and the nuts with lockwashers and flat washers (item C).
- 9. Reinstall the bail assembly or leveling rods (item A) and secure by installing the spring clips (item B).

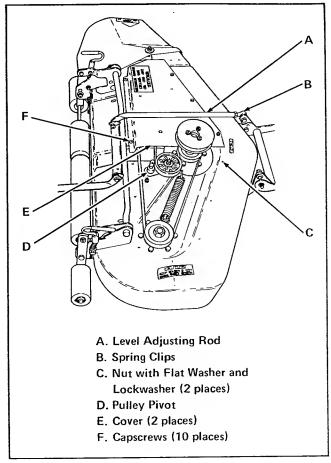


Figure 20. V-Belt Removal

## **Assembly**

#### CONTENT OF SECTION

The mower may be received partially assembled. Procedures to complete the assembly of the 36", 42", and 48" mowers are provided in this section.

#### ASSEMBLY OF 36" MOWER

The hitch assembly and discharge deflector are normally removed prior to shipment. To assemble these items, proceed as follows:

- 1. Align upper holes of hitch (item S, figure 21) with holes of mower mounting bracket (item R).
- 2. Insert spacers (item X) through upper holes of hitch
- 3. Install two bolts (item Y) with flat washers (item A), lockwashers (item B), and nuts (item C) to secure the hitch in place.

- 4. Align holes of bail assembly (item E) with lower holes of hitch (item S).
- 5. Insert spacers (item Q) through lower holes of hitch.
- 6. Install two bolts (item O) with flat washers (item P), lockwashers (item T), and nuts (item U).
- 7. Install pins (item W) and spring pins (item V) in front holes of the hitch assembly.
- 8. Make sure eyebolts (item D) at rear of bail assembly are secured to height adjusting arms with shoulder bolts.
- 9. Position discharge deflector (item K) over discharge opening. Notch in front of deflector must fit under flat washer (item N).
- 10. Secure deflector to mower using carriage bolt (item M), flat washer (item F), lockwasher (item G), and nut (item H), also use capscrew (item I), lockwasher (item J), and nut (item L).

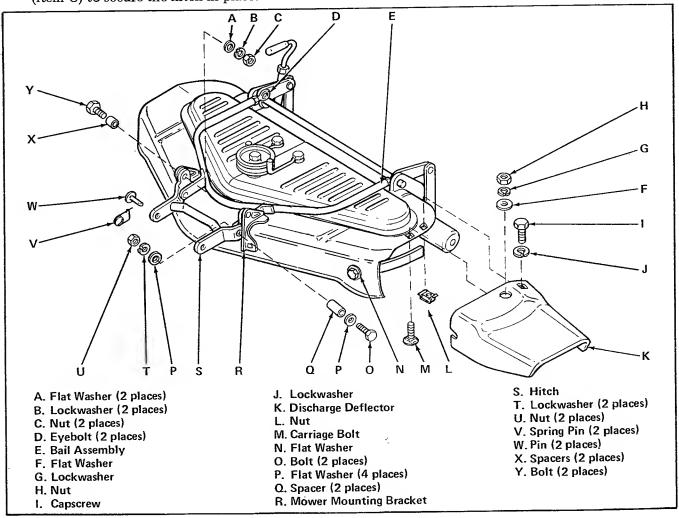


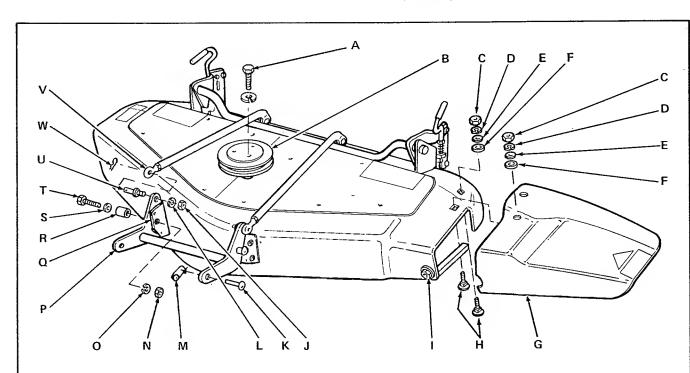
Figure 21. Assembly of 36" Mower

## ASSEMBLY OF 42" MOWER WITH 5-1/8" PULLEY

The hitch assembly, discharge deflector, and main drive pulley are normally removed from the 42" mower before shipment. The mower is to be assembled in one of two ways. If the outside diameter of the pulley is 5-1/8", use the procedure below. If the outside diameter of the pulley is 4-1/2", use the procedure on the next page.

- 1. Align the hitch (item P, figure 22) with the lower holes of the mower mounting bracket (item Q).
- 2. Insert the spacers (item R) through the holes of both the mounting bracket and hitch.
- 3. Install the two bolts (item T) with flat washers (item S), lockwashers (item O), and nut (item N) to secure the hitch in place.
- 4. Insert the threaded ends of the shoulder

- bolts (item U) through the holes in the hitch as shown in figure 22.
- 5. Install lockwashers (item L) and nuts (item J) to secure the shoulder bolts.
- 6. Place eyebolt of leveling arms (item V) over smooth end of shoulder bolts and install spring retaining pins (item W).
- 7. Install pins (item K) and spring pins (item M) in front holes of hitch assembly.
- 8. Position discharge deflector (item G) over discharge opening. Notch in front of deflector must fit under flat washer (item I).
- 9. Install two carriage bolts (item H) upward through top deck of mower and deflector and secure by installing flat washers (items E and F), lockwashers (item D), and nuts (item C).
- 10. Place pulley (item B) in place and secure by installing three capscrews with lockwashers (item A).



- A. Capscrew and Lockwasher (3 places)
- B. Pulley
- C. Nut (2 places)
- D. Lockwasher (2 places)
- E. Flat Washer (2 places)
- F. Flat Washer (2 places)
- G. Deflector
- H. Bolt (2 places)

- I. Flat Washer
- J. Nut (2 places)
- K. Long Pin (2 places)
- L. Lockwasher (2 places)
- M. Spring Pin (2 places)
- N. Nut (2 places)
- O. Lockwasher (2 places)
- P. Hitch

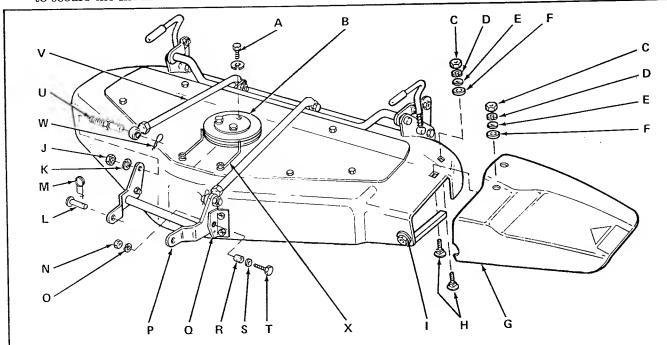
- Q. Mower Bracket (2 places)
- R. Spacer (2 places)
- S. Flat Washer (2 places)
- T. Bolt (2 places)
- U. Shoulder Bolt (2 places)
- V. Leveling Arm (2 places)
- W. Spring Pin (2 places)

# ASSEMBLY OF 42" MOWER WITH 4-1/2" PULLEY

If the outside diameter of the mower pulley measures 4-1/2", assemble the mower as follows:

- 1. Align the hitch (item P, figure 23) with the upper holes of the mower mounting bracket (item Q).
- 2. Insert the spacers (item R) through the holes of both the mounting bracket and hitch.
- 3. Install two bolts (item T) with flat washers (item S), lockwashers (item O), and nuts (item N) to secure the hitch in place.
- 4. Insert the threaded ends of the shoulder bolts (item U) through the holes in the hitch as shown in figure 23.
- 5. Install lockwashers (item K) and nuts (item J) to secure the shoulder bolts.

- 6. Place eyebolt of leveling arms (item V) over smooth end of shoulder bolts and install spring retaining pins (item W).
- 7. Install pins (item L) and spring pins (item M) in front holes of the hitch assembly.
- 8. Position discharge deflector (item G) over discharge opening. Notch in front of deflector must fit under flat washer (item I).
- 9. Install two carriage bolts (item H) upward through top deck of mower and deflector and secure by installing flat washers (items E and F), lockwashers (item D), and nuts (item C).
- 10. Place pulley (item B) in place and secure by installing three capscress with lockwashers (item A).
- 11. Install the two belt guides (item X) using the flat washers, lockwashers, and nuts provided on the mower.



- A. Capscrew and Lockwasher (3 places)
- B. Pulley
- C. Nut (2 places)
- D. Lockwasher (2 places)
- E. Flat Washer (2 places)
- F. Flat Washer (2 places)
- G. Deflector
- H. Bolt (2 places)

- I. Flat Washer
- J. Nut (2 places)
- K. Lockwasher (2 places)
- L. Long Pin (2 places)
- M. Spring Pin (2 places)
- N. Nut (2 places)
- O. Lockwasher (2 places)
- P. Hitch

- Q. Mower Bracket (2 places)
- R. Spacer (2 places)
- S. Flat Washer (2 places)
- T. Bolt (2 places)
- U. Shoulder Bolt (2 places)
- V. Leveling Arm (2 places)
- W. Spring Pin (2 places)
- X. Belt Guide (2 places)

#### ASSEMBLY OF 48" MOWER

The hitch assembly and discharge deflector are normally removed from the main assembly prior to shipment. To assemble these items, proceed as follows:

- 1. Align the holes in the hitch (item Q, figure 24) with the holes in the mower mounting bracket (item J).
- 2. Insert the spacers (item L) through the holes of both the mounting bracket and hitch.
- 3. Install the two bolts (item K) with lockwashers (item O) and nuts (item P) to secure the hitch in place.

- 4. Place the yokes of the bail assembly (item I) over the ends of the hitch and install the short pins (item R) and spring pins (item S).
- 5. Place long pins (item M) and spring pins (item N) in the front holes of the hitch for storage.
- 6. Position discharge deflector (item F) over discharge opening. Notch in front of deflector must fit under flat washer (item H).
- 7. Install two carriage bolts (item G) upward through top deck of mower and discharge deflector and secure by installing flat washers (items D and E) and nuts (item C).

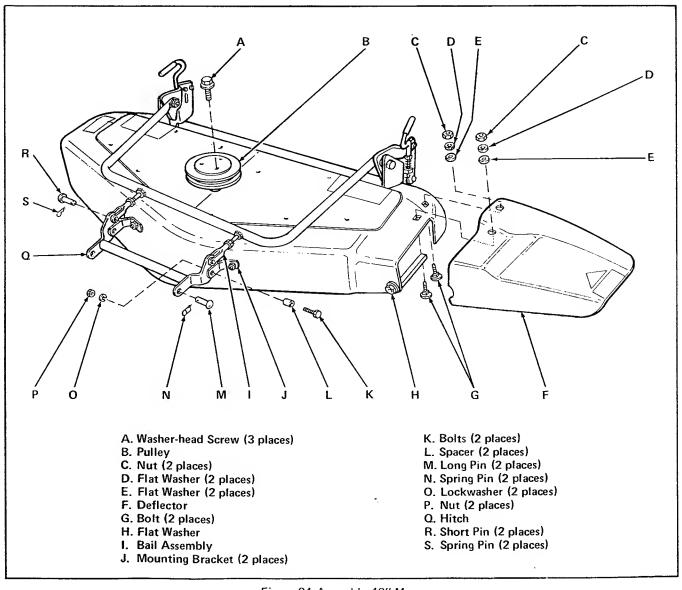


Figure 24. Assembly 48" Mower

# **Specifications**

	36" Mower	42" Mower	48" Mower	
Effective Cutting Width	36 inches	42 inches	48 inches	
Dimensions (inches)	30 long by 40-1/4 wide by 6 deep.	31-1/2 long by 44-3/4 wide by 6 deep.	36 long by 54 wide by 6 deep.	
Overall Width Including Deflector	48 inches	54-1/2 inches	60-3/4 inches	
Weight	96 lb.	115 lb.	136 lb.	
Cutting Height	Adjustable between approximately 1-5/8 and 3-1/8 inches.			
Blade Arrangement	Three staggered blades.			
Mower Input Drive	V-belt from tractor pulley.			
Side Spindle Drive	Cushioning internal V-belt with spring loaded idler to maintain proper tension.			
Spindle Bearings	Sealed ball bearing.			